

# INTRODUCTION

## SECTION I

### THE HYDROGEOMORPHIC APPROACH TO WETLAND FUNCTIONAL ASSESSMENTS

Section I contains the approved tools for performing wetland functional assessments. The Hydrogeomorphic Approach to Wetland Functional Assessments (HGM) is the procedure the Natural Resources Conservation Service (NRCS) has adopted for assessing wetland functional performance. National policy regarding the use of HGM is found in the National Food Security Act Manual (NFSAM,) Third Edition, Parts 516.12 and 527.6. Additional information on the concept of HGM can be found in U.S. Army Corps of Engineers Waterways Experiment Station Technical Report WRP-DE-4, A Hydrogeomorphic Classification for Wetlands.

The HGM tools, or models, that have been approved for use in assessing wetland functions in South Dakota are as follows:

1. Operational Draft Guidebook for the Hydrogeomorphic Assessment of Temporary and Seasonal Prairie Pothole Wetlands, 1997. Approved for use on temporary and seasonal depressional (pothole) wetlands in eastern South Dakota.
2. Interim Hydrogeomorphic Assessment Model for Groundwater Discharge, Low Permeability (Glacial Till) Substrate, Slope (Linear) Wetlands in the Northern Plains, Version 4.0 (May, 2001). Approved for use on slope wetlands lacking concentrated (channel) flow. Reference domain is eastern South Dakota, may be used throughout the state.
3. Interim Hydrogeomorphic Functional Assessment Model for Low-Gradient, Fine Substrate Riverine Wetlands with Defined Channels and Intermittent (Seasonal) Flow Regimes in Eastern South Dakota, Version 1.1, November 2000. Approved for use on wetlands associated with intermittent stream systems, primarily in eastern South Dakota.
4. Interim Functional Assessment Model for Lake Dakota Sand Plains, Ver. 2.2, February 28, 1999. Approved for use primarily in northeastern South Dakota.
5. Draft Interim Model for Kansas Wooded Riverine Wetlands, Version 3.0, July, 1997. To be used primarily on wetlands associated with perennial streams.
6. Interim Functional Assessment Model for Playa Wetlands, Revised Draft, January 22, 1998. To be used primarily on depressional wetlands (high plains playas) in western South Dakota.
7. A Procedure for Assessment of Endosaturated Depressional Wetlands on MLRA 65 Sand Plain, Version 1.0, October 16, 1998. For use on depressional wetlands in the NE-SD sand hills (MLRA 65).

# **SECTION I**

## **THE HYDROGEOMORPHIC APPROACH TO WETLAND FUNCTIONAL ASSESSMENTS**

### **TABLE OF CONTENTS**

#### **DATE**

#### **Intermittent Stream Model**

November 2000

(Interim Hydrogeomorphic Functional Assessment Model for Low-Gradient, Fine Substrate Riverine Wetlands with Defined Channels and Intermittent (Seasonal) Flow Regimes in Eastern South Dakota – Version 1.1)

#### **Kansas Wooded Riverine Wetlands Model**

July 1997

(Draft Interim HGM Model For Kansas Wooded Riverine Wetlands – Version 3.0)

#### **Playa Wetlands Model**

January 22, 1998

(Interim Functional Assessment Model For Playa Wetlands )

#### **Sand Plains Model**

February 28, 1999

(Interim Functional Assessment Model For Lake Dakota Sand Plains – Version 2.2)

#### **Slope Wetlands Model**

May 2001

(Interim Hydrogeomorphic Functional Assessment Model For Groundwater Discharge, Low Permeability (Glacial Till) Substrate, Slope (Linear) Wetlands In The Northern Plains – Version 4.0)